

Title (en)

METHODS FOR DNA LIBRARY GENERATION TO FACILITATE THE DETECTION AND REPORTING OF LOW FREQUENCY VARIANTS

Title (de)

VERFAHREN ZUR ERZEUGUNG EINER DNA-BIBLIOTHEK ZUR ERMÖGLICHUNG DER DETEKTION UND MELDUNG VON NIEDERFREQUENZVARIANTEN

Title (fr)

PROCÉDÉS DE GÉNÉRATION DE BIBLIOTHÈQUES D'ADN POUR FACILITER LA DÉTECTION ET L'ÉLABORATION DE RAPPORTS DE VARIANTES DE BASSE FRÉQUENCE

Publication

EP 3795685 A1 20210324 (EN)

Application

EP 19198542 A 20190920

Priority

EP 19198542 A 20190920

Abstract (en)

[origin: CA3149056A1] Methods are disclosed for adding adapters to fragmented nucleic acids for next generation sequencing, including providing numerical codes based on variable adapter molecular barcode lengths on both sides of the fragmented nucleic acids and identifying reads from the same fragment based on both barcodes. The methods and products allow for the amplification of the fragmented nucleic acids when there is a low yield of isolated fragmented nucleic acids and also for efficient and reliable detection of low-frequency mutations including in subpopulations of cells within a subject.

IPC 8 full level

C12N 15/10 (2006.01); **C12Q 1/6869** (2018.01)

CPC (source: EP KR US)

C12N 15/1065 (2013.01 - EP KR US); **C12Q 1/6869** (2013.01 - EP KR US); **C12Q 2525/191** (2013.01 - KR); **C12Q 2525/204** (2013.01 - KR); **C12Q 2535/122** (2013.01 - KR)

Citation (applicant)

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- XU: "A review of somatic single nucleotide variant calling algorithms for next-generation sequencing data", COMPUTATIONAL AND STRUCTURAL BIOTECHNOLOGY JOURNAL, vol. 16, February 2018 (2018-02-01), pages 15 - 24
- SHUGAY ET AL.: "MAGERI: Computational pipeline for molecular-barcoded targeted resequencing", PLOS COMPUT. BIOL., vol. 13, no. 5, May 2017 (2017-05-01)
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Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 19198542 A 20190920; AU 2020349622 A 20200921; BR 112022004821 A 20200921; CA 3149056 A 20200921; EP 2020076246 W 20200921; EP 20771905 A 20200921; JP 2022512862 A 20200921; KR 20227007802 A 20200921; US 202017438461 A 20200921